



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SWA3-2
Job Sheet 183067



Part No: SWA3-2

Job Qty: 1 ea

Part Name: Electric Swivel 3,000 lb Safe Work Load (1,360 Kg)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/12/18

Job Tracking No:

Due Date: 11/29/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG SWA3 Rev 3

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		11/29/18	0.00	0.00	Start Up Small Fab-2		
110	Small Fab	1 pcs		11/29/18	0.00	2.00	Small Fab-6		
120	QC	1 pcs		11/29/18	0.00	0.00	QC5		
125	DC	1 pcs		11/29/18	0.00	0.00	DC		
130	Packaging	1 pcs		11/29/18	0.00	0.00	Packaging3		
140	QC21-FG	1 Ea		11/29/18	0.00	0.00	QC21		

Part Op 110 - Assemble as per DWG. Sheet 1 ***All assembly to be done in accordance with SWA3 swivel manual*** Engrave
Descriptions: T/N And / or S/N number as required Using Marktronic engraver as per DWG. Laser engrave dart logo as per DWG.

125 - Photocopy blue file OM & OOPM-SWA3A Rev3

130 - Bag and tag

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-832-3/8	Set Screw	1 Ea (1 ea)	90-Start up Operation	5027242
92210A303	Flat Socket Cap Screw	4 pcs (4 ea)	110-Small Fab	5083914
EL-PLUG-F	3-Prong Female Spade Plug	1 Ea (1 ea)	110-Small Fab	5079998
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	110-Small Fab	5073957
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge	6 ft (6 ea)	110-Small Fab	5097767
SWA3-100	Upper End - Swa3 Swivel	1 Ea (1 ea)	110-Small Fab	5108526
SWA3-200	Lower End	1 Ea (1 ea)	110-Small Fab	5029398
SWA3-300	Wire Clamp	2 Ea (2 ea)	110-Small Fab	5076392
SWA3-400	Button Head Screw	2 Ea (2 ea)	110-Small Fab	5108099
SWA3-500	Connector Bushing-230	1 Ea (1 ea)	110-Small Fab	5117115
SWA3-600	O-Ring	1 Ea (1 ea)	110-Small Fab	5097844
SWA3-700	9529K15 Bearing Balls - 1/4"	32 Ea (32 ea)	110-Small Fab	5097690
SWA6A-1900	1/4" Female Spade Connector	4 Ea (4 ea)	110-Small Fab	5097603
SWA6A-900A	Rotary Connector - 2 wire	1 pcs (1 ea)	110-Small Fab	5116179

GREASE AEROSHELL NO:7 (M138724) LOCTITE 242 (M138766)

SILCOGE (M138942)

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	188-FPSS-832-3/8	1	60	0
110-Small Fab	92210A303	4	92	0
	EL-PLUG-F	1	29	0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

EL-PLUG-M	1	99	0
EL314-SJTOW	6	274	0
SWA3-100	1	10	0
SWA3-200	1	6	0
SWA3-300	2	29	0
SWA3-400	2	52	0
SWA3-500	1	0	0
SWA3-600	1	14	0
SWA3-700	32	864	0
SWA6A-1900	4	588	0
SWA6A-900A	1	18	0

Part Specifications

Specifications could not be found.

Plex 9/12/18 7:04 AM Dart.lajeunesse.marie

DART
AEROSPACE

Container No: S113960



Part: SWA3-2

Job No: 133067

Serial No/Batch: S113960

Revision: 3

Inspector:

Exp Date:

Instructions:

1000 DART AEROSPACE
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/27/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

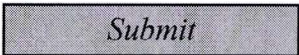
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order 183067Customer 7005Number of Wires 2Date 2018/10/25Serial Number S113960

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	3,000	Check for Conductivity against all wires.	- PASS
1	3,000	Check all wires for grounding against swivel body.	- PASS
1	1,500	Check for Conductivity against all wires.	- PASS
1	1,500	Check all wires for grounding against swivel body.	- PASS
1	750	Check for Conductivity against all wires.	- PASS
1	750	Check all wires for grounding against swivel body.	- PASS
1	0	Check for Conductivity against all wires.	- PASS
1	0	Check all wires for grounding against swivel body.	- PASS

Test Conducted By: ALAIN PATRY
TechnicianSignature: Sylvie Boucher
QC 5 Small FAB / QASubmit

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>183067</u> Part No. <u>SWA### Swivels</u> NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐									
Date : <u>2018/10/25</u>	Step #:	QTY Effective :		MRB (QSI042) Approval Feb 01, 2018							
Description Work Order Deviation - Use a combination of heatshrink tubing and RTV Silicone to create a watertight seal around all electrical connections. - Use a D2728-1 Placard in place of the laser engraved Dart logo			Disposition These deviations are acceptable to carry out on the following swivels: - SWA3 - SWA6A - SWA10A - SWA15A - SWA25A - PSWA25A There is no impact on fit, form or function.								
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; vertical-align: top;"> Environment ☐ Design ☒ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:50%; vertical-align: top;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☒ Process Improvement ☒ Manufacturing Process ☐ Past Due ☐ </td> </tr> </table>			Environment ☐ Design ☒ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☒ Process Improvement ☒ Manufacturing Process ☐ Past Due ☐	FAULT CATEGORY <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%; vertical-align: top;"> Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="width:33%; vertical-align: top;"> Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:33%; vertical-align: top;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> <td style="width:33%; vertical-align: top;"> Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐ </td> </tr> </table>			Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
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